CLAIMS

1. A system for generating an executable code to be executed by a set of processors, said system comprising:

- reading means for reading an input document for describing a distribution of an image processing application over said set of processors, said input document comprising at least a module describing at least part of an image processing function to be applied to at least one input image by a processor of said set of processors, said input image being subdivided into image strips, said module comprising at least one input port for receiving image strips to be processed by said module via at least one input link and/or at least one output port for transmitting processed image strips over at least one output link, said input/output port being specified by a geometry and a law, said geometry defining a division of said input image into a set of image strips and said law defining a subset of said set of image strips that is to pass through said input/output port,
- compiling means for detecting inconsistencies in said input document,
- building means for building an executable code from said compiled document for programming said set of processors.

2. A system as claimed in claim 1, wherein said compiling means are designed to check a syntax of said input document and a validity of said distribution.

3. A system as claimed in claim 1, wherein said geometry locates an image strip by means of an image strip index, and said law defines said image strip index as a function of an iteration index.

4. A system as claimed in claim 1, wherein said geometry and said law are parametrized by parameters specified by said input document, said parameters being relative to a module.

5. A system as claimed in claim 3, comprising calculating means for converting relative parameters into absolute parameters with respect to said distribution.

6. A system as claimed in claim 3, wherein said law is parametrized by a rank and a period, said rank being the image strip index of a first image strip and said period being a difference between the indices of two consecutive image strips to be transmitted through said input/output port.

7. A system as claimed in claim 1, wherein said input document has a graphical format.

8. An input document for describing a distribution of an image processing application over said set of processors, said input document comprising at least a module describing at least part of an image processing function to be applied to at least one input image by a processor of said set of processors, said input image being divided into image strips, said module comprising at least one input port for receiving image strips to be processed by said module via at least one input link and/or at least one output port for transmitting processed image strips over at least one output link, said input/output port being specified by a geometry and a law, said geometry defining a subdivision of said input image into a set of image strips and said law defining a subset of said set of image strips that is to pass through said input/output port

9. A method of distributing an image processing application over a set of processors, said method comprising the steps of:

- reading an input document, said input document being designed for describing a distribution of an image processing application over said set of processors and comprising at least a module describing at least part of an image processing function to be applied to at least one input image by a processor of said set of processors, said input image being divided into image strips, said module comprising at least one input port for receiving image strips to be processed by said module via at least one input link and/or at least one output port for transmitting processed image strips over at least one output link, said input/output port being specified by a geometry and a law, said geometry defining a subdivision of said input image into a set of image strips and said law defining a subset of said set of image strips that is to pass through said input/output port,
- compiling said input document for detecting inconsistencies in said input document,

- building an executable code from said compiled input document for programming said set of processors.

10. An executable code comprising a set of instructions which, when loaded into a set of processors, causes the set of processors to carry out the image processing application specified by the input document as claimed in claim 7.

11. A computer program comprising a set of instructions which, when loaded into a host processor, causes said host processor to carry out the method as claimed in claim 9.